UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,758	07/17/2003	Hiroyuki Takahashi	723-1412	9151

23117	7590	09/12/2005

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER
BROOME, SAID A

ART UNIT	PAPER NUMBER
2671	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/620,758	TAKAHASHI ET AL.
	Examiner	Art Unit	
	Said Broome	2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 19 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The preamble of claim 5 contains means plus function language which is used in an apparatus claim, and the contents of the body are directed towards a method claim. Therefore it is difficult to distinguish whether the claim is directed towards a method or apparatus. Claim 19 refers to an image processing method of claim 13, however claim 13 is directed towards an image processing program that is stored on a computer readable medium for execution by a processing system. Claim 26 refers to an image processing method according to the independent claim 20. However, the preamble of the independent claim 20 refers to an image processing apparatus and therefore claim 26 improperly references the image processing method.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 13 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hot

Shots Golf 3 Golfer's Handbook (Playstation 2 game, published by SCEA).

Regarding claims 1 and 5, The Hot Shots Golf 3 Golfer's Handbook displays the

generation of a 3D golf course within a 3D space on page 12. The Hot Shots Golf 3 Golfer's

Handbook also shows a grid rendered on a surface on page 16, and the combination of several

grid lines rendered in vertical and horizontal directions on page 17. It is also shown from The

Hot Shots Golf 3 Golfer's Handbook that sections of the grid contain points on the grid lines in

the vertical and horizontal directions on page 17. The formation of grid lines from several grid

line elements is shown on page 16, in which several grid lines are formed from grid line elements

intersecting in vertical and horizontal directions. The number of line segments for grid rendering

is shown to be dependent on the slope of the surface and the distance from the player to the hole

as shown on page 16. The flow of an object on the golf course surface is determined form

visually directive points that flow at a speed responsive to the degree of slope on the surface,

which is illustrated on page 17.

The Hot Shots Golf 3 Golfer's Handbook also describes what is disclosed in claims 2, 6,

13 and 20. A grid rendered on a surface is illustrated on page 16 and one or more moving grid

line elements are described and illustrated on page 17 where it is explained that points that lie

over the grid move in response to the degree of slope. It is also shown on page 16 that the

spacing of the grid lines, which are particular lengths between grid line elements, are rendered at

a responsive speed to the slope of the surface of the virtual golf course. This is shown in the

picture on page 16 where it is shown that the spacing of the grid lines decreases as the distance

from the player to the hole increases, as well as when the slope of the surface changes. Therefore

the speed of a golf ball object remains constant until the gradient of the terrain, or other factors

that would impact game play as described on page 15, changes while traveling over a surface.

The Hot Shots Golf 3 Golfer's Handbook describes what is disclosed in claim 3. It is

described on page 17 that the grid lines on the surface are rendered with a visual direction that

displays the direction coincident with the slope of the surface in response to the ball during game

play as illustrated in the picture on the same page. The limitation of claim 4 is also described in

The Hot Shots Golf 3 Golfer's Handbook where a generated golf course land surface is

illustrated on page 16. It is shown on page 4 that an input device or controller enables a user to

play a golf game generated within a virtual space, which is shown on page 16.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in the art to which said subject
> matter pertains. Patentability shall not be negatived by the manner in which the invention was
> made.

Claims 7-12, 14-19 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Hot Shots Golf 3 Golfer's Handbook in view of Muramori et al. (US 2002/0196263).

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 7, 14 and 21

except for the grid line elements each containing a head and tail section. Muramori et al. teaches

a grid line containing a head and tail section in paragraph 0050 lines 5-7 and is also illustrated in

Figure 4. It would have been obvious to one of ordinary skill in the art to combine the teachings

of The Hot Shots Golf 3 Golfer's Handbook with the grid line head and tail sections of

Muramori et al. because this combination improves the processing of individual grid line

elements by enabling the processor to store the values of the head and tail section to determine

several mathematical attributes of the grid such as speed of objects on the surface, and the slope

of the virtual golf course.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 8, 15 and 22

except for the increase in the number of grid line elements as the slope changes. Muramori et al.

teaches a derivation in the number of grid line elements in response to the slope of the surface in

paragraph 0047 lines 1-5. It is also illustrated in Figure 3 that as the slope increases, the number

of grid line elements increases. It would have been obvious to one of ordinary skill in the art to

combine the teachings of The Hot Shots Golf 3 Golfer's Handbook with the increase of grid line

elements based on the slope as taught by Muramori et al. because this combination would

produce a more accurate display of the gradient of a golf course surface during a virtual golf

game which differentiates between elevations by displaying higher elevated areas of a golf

course with an increase in the number of grid lines and lower elevations with a decrease in the

number of grid lines.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 9, 16 and 23

except for storage of the number of elements for each respective grid line. Muramori et al.

teaches that there is polygon and texture data stored on a storage medium, which comprises the

number of grid line elements that form the polygon grid of the surface of the golf course, in

paragraph 0040 lines 11-12. It would have been obvious to one of ordinary skill in the art to

combine the teachings of The Hot Shots Golf 3 Golfer's Handbook with the storage component

of Muraromi et al. because this combination produces faster access of polygon data for rendering

three dimensional objects when the golf game program is executed on a computer readable

medium.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 10, 17 and

24 except for the grid line elements generated from textures. Muramori et al. teaches that a

texture is applied to each polygon and each grid line that forms the surface in paragraph 0039

lines 1-7. It would have been obvious to one of ordinary skill in the art to combine the teachings

of The Hot Shots Golf 3 Golfer's Handbook with the applied textures to grid line as taught by

Muramori et al. because this combination would produce a surface of a virtual golf course which

appears green in grassy areas and has various sloped areas.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 11, 18 and

25 except for the movement of grid lines affected by the displacement of textures while the game

is displayed. Muramori et al. teaches that the textures that are applied to the polygons that are

formed with grid lines move in response to the slope of the surface in which those grid lines are

located. It is also described that the grid lines and textures are sent to the monitor apparatus to be

displayed in paragraph 0039 lines 1-7, and a display frame is illustrated in Figure 5. It would

have been obvious to one of ordinary skill in the art to combine the teachings of The Hot Shots

Golf 3 Golfer's Handbook with the movement of grid lines affected by the displacement of

textures as taught by Muramori et al. because this combination produces a virtual golf course

whose textures move as the grid lines that form the surface move, thereby accurately displaying

the slopes of the golf course.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 12, 19 and 26 except for the generation of grid lines from a reference texture. Muramori et al. teaches that texture data is stored on the storage medium D, which is illustrated in Figure 1. Therefore the textures, which are contained on a storage medium, are referenced and applied to the grid lines as stated in paragraph 0039 lines 1-7. It would have been obvious to one of ordinary skill in the art to combine the teachings of The Hot Shots Golf 3 Golfer's Handbook with the referencing of textures as taught by Muramori et al. because this combination produces a golf game program that processes an accurate representation of the texture of a virtual golf course surface within a golf game program by referencing those textures from a storage medium.

It is also apparent from Muramori et al. that the image processing apparatus described in the preamble of claims 1-4 and 20-25, the image processing method described in claims 6-12 and the image processing program described in claims 13-18 are all described in paragraph 0012 lines 1-8.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are made of record because they pertain to 3D golf video games: Kelson et al., Matsuyama et al., Kunzle et al, Sugimoto and Imaeda et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Said Broome whose telephone number is (571) 272-2931. The examiner can normally be reached between 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Broome
8/31/05   *SB*

ULKA J. CHAUHAN
PRIMARY EXAMINER